EX PARTE OR LATE FILED

DOCKET FILE COPY ORIGINAL

COVINGTON & BURLING

1201 PENNSYLVANIA AVENUE, N.W.

P.O. BOX 7566

WASHINGTON, D.C. 20044-7566

(202) 662-6000

TELEFAX: (202) 662-6291

TELEX: 89-593 (COVLING WSH)

CABLE: COVLING

LECONFIELD HOUSE

CURZON STREET

LONDON W1Y 8AS

ENGLAND

TELEPHONE: 071-495-5655

TELEFAX: 071-495-3101

BRUSSELS CORRESPONDENT OFFICE

44 AVENUE DES ARTS

BRUSSELS 1040 BELGIUM

TELEPHONE: 32-2-512-9890

TELEFAX: 32-2-502-1598

KURT A. WIMMER

DIRECT DIAL NUMBER

(202) 662-5278

April 4, 1994

BY MESSENGER

RECEIVED

APR 4 1994

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF SECRETARY

Mr. William F. Caton, Acting Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222
Washington, D.C. 20554

Re: Gen. Docket No. 90-314

Dear Mr. Caton:

American Personal Communications ("APC"), pursuant to Section 1.1206 of the Commission's Rules, hereby notifies the Commission that copies of the attached DSS Research study on the adverse effects of delay on the implementation and success of PCS today have been provided to the Commission personnel noted below.

Please direct any inquiries concerning this matter to the undersigned.

Very truly yours,

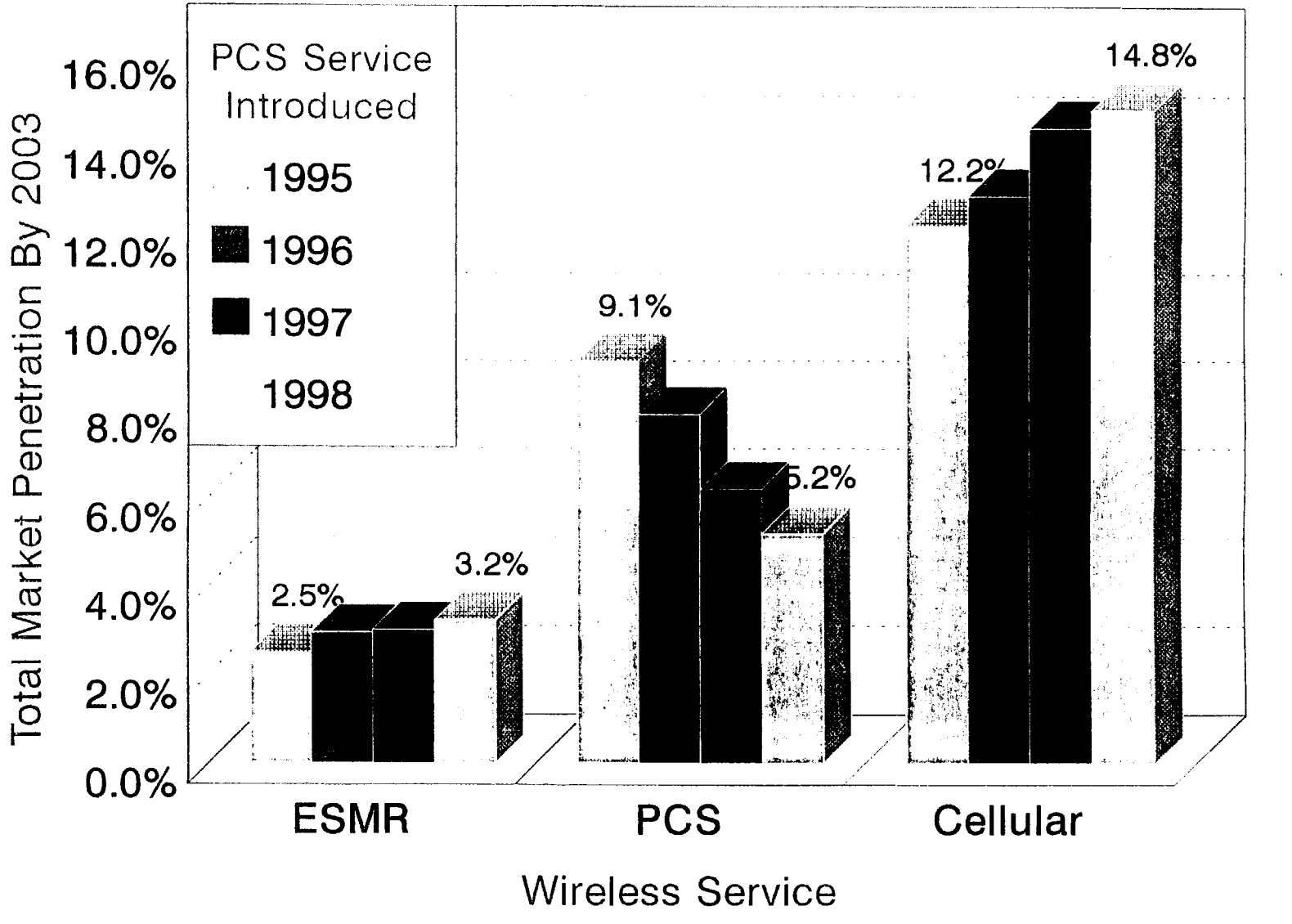
Kurt A. Wimmer

Attorney for American Personal Communications

cc: Hon. Reed E. Hundt
Hon. James H. Quello
Hon. Andrew C. Barrett
Mr. Ralph A. Haller
William E. Kennard, Esq.
Dr. Robert M. Pepper
Mr. Donald H. Gips
Mr. John R. Williams
Thomas P. Stanley, Ph.D
Mr. Fred Thomas
Mr. A. Richard Metzger
Ms. Beverly G. Baker
Karen Brinkmann, Esq.
Rudolfo Lujan Baca, Esq.
Byron F. Marchant, Esq.
Renee Licht, Esq.
Peter A. Tenhula, Esq.
Michael Katz, Ph.D
Mr. David Rosston
Dr. Evan R. Kwerel
Mr. Bruce A. Franca
David R. Siddall, Esq.
Mr. Gerald P. Vaughn
Mr. John Winston

No. of Copies rec'd 0
List ABCDE

EFFECT OF DELAYED PCS DEPLOYMENT



PCS WIRELESS MARKET INTRODUCTION -- EFFECT OF DELAYED DEPLOYMENT BETWEEN 1995 AND 1998

Overall Effect of Delaying PCS Deployment

Cellular providers, and ESMR providers who offer PCS-like services, will have a distinct advantage over PCS providers if PCS deployment is delayed even one year. A two year delay (deployment in 1997) could reduce the market penetration of PCS by one-third. If PCS is delayed, cellular and ESMR providers could experience rapid growth in subscribers while continuing to charge current prices (approximately $70 per month). These providers could then reduce their prices to the levels expected for PCS services ($45 per month), once PCS is deployed in their market, to remain competitive.

Any delays in the deployment of PCS will primarily benefit cellular providers. Although ESMR providers may gain market share at a faster rate than cellular providers, ESMR companies will not have a position of market dominance like the cellular companies.

Deployment of PCS systems requires a 12 to 18 month construction period before commercial service can be offered (e.g. 1995 deployment would require license allocations in the summer of 1994). The lengthy construction period means that PCS services can not be commercially deployed within the first 12 months after licenses are issued.

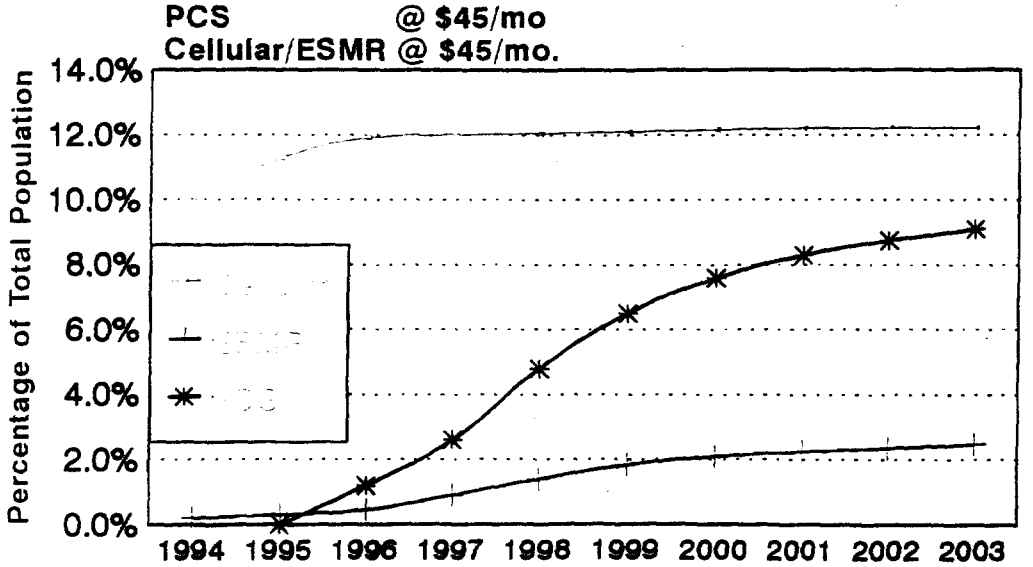
PCS Deployed 1995

Deployment of PCS in 1995 could result in 50 percent greater market penetration for PCS by 2003, compared to the market penetration if PCS deployment is delayed until 1997. This assumes that cellular companies convert to digital by 1995 and ESMR companies (like MCI/Nextel) introduce their digital networks in 1995 *with PCS-like* service. Cellular and ESMR providers are expected to price their services so that the average monthly subscriber bill is similar to that of PCS subscribers. Cellular, ESMR and PCS providers are assumed to be offering digital services in 1995 at an average monthly cost of $45 per subscriber.

The projected market shares in 2003 for two cellular, one ESMR and three PCS providers (2 MTAs, 1 BTA) are as follows:

Two cellular providers	12.2%
One ESMR provider	2.5%
Three PCS providers	9.1%
Total wireless share	23.8%

MARKET SHARE



Cellular	10.0%	11.3%	11.9%	12.0%	12.1%	12.1%	12.2%	12.2%	12.2%	12.2%
ESMR	0.2%	0.3%	0.5%	0.9%	1.4%	1.9%	2.1%	2.3%	2.4%	2.5%
PCS		0.0%	1.2%	2.6%	4.8%	6.5%	7.6%	8.3%	8.8%	9.1%

Beginning of Year

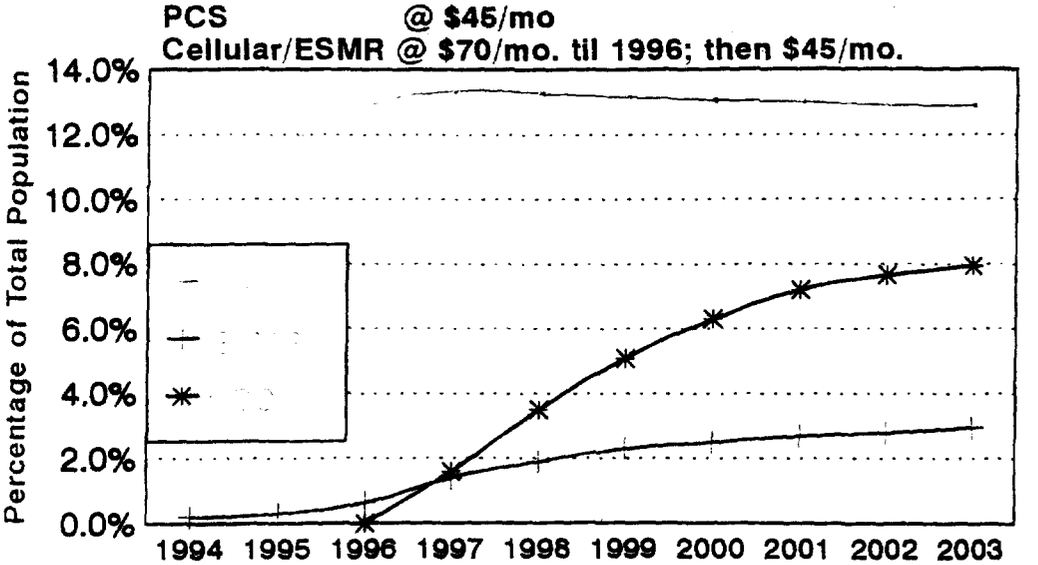
** Assumes digital ESMR, cellular and PCS all begin operation in 1995.*

PCS Deployed 1996

PCS providers can lose 10 to 15 percent of their market penetration, if deployment is delayed until 1996 instead of 1995. This assumes that cellular and ESMR companies begin operating digital networks in 1995. Both cellular and ESMR providers would price their services so that their average monthly subscriber bill is $70, until PCS is introduced in 1996. Once PCS services begin operation in 1996, cellular and ESMR providers are expected to lower their prices to match the average PCS bill of $45 per month. The projected market shares for this scenario are:

Two cellular providers	12.9%
One ESMR provider	3.0%
Three PCS providers	7.9%
Total wireless share	23.8%

MARKET SHARE



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Cellular	10.0%	11.6%	12.9%	13.4%	13.3%	13.2%	13.1%	13.0%	12.9%	12.9%
ESMR	0.2%	0.3%	0.6%	1.4%	1.9%	2.3%	2.5%	2.7%	2.8%	3.0%
PCS			0.0%	1.6%	3.5%	5.1%	6.3%	7.2%	7.7%	7.9%

Beginning of Year

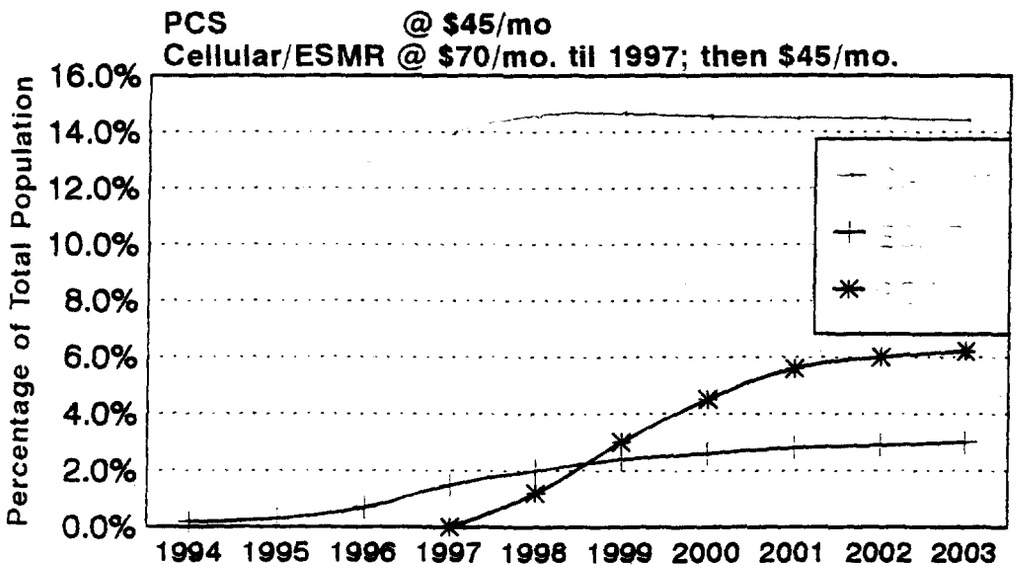
** Assumes digital ESMR and cellular operation in 1995, PCS operation in 1996.*

PCS Deployed 1997

If PCS providers are not able to deploy their services until the beginning of 1997, the head-start advantage for cellular and ESMR providers will be much greater. Deployment in 1997 will reduce the total market penetration for PCS by one-third of what is predicted for 1995. Cellular companies are still assumed to be providing digital cellular service by 1995 at an average monthly price of $70 per subscriber. ESMR companies will deploy their digital networks in 1995 at the same average price as cellular. PCS deployment in 1997 will lead cellular and ESMR providers to reduce their average bills to $45 per month to match the price of PCS. The projected market shares under these assumptions are:

Two cellular providers	14.4%
One ESMR provider	3.0%
Three PCS Providers	6.2%
Total wireless share	23.6%

MARKET SHARE



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Cellular	10.0%	11.6%	13.0%	14.0%	14.6%	14.7%	14.6%	14.5%	14.5%	14.4%
ESMR	0.2%	0.3%	0.7%	1.5%	2.0%	2.4%	2.6%	2.8%	2.9%	3.0%
PCS				0.0%	1.2%	3.0%	4.5%	5.6%	6.0%	6.2%

Beginning of Year

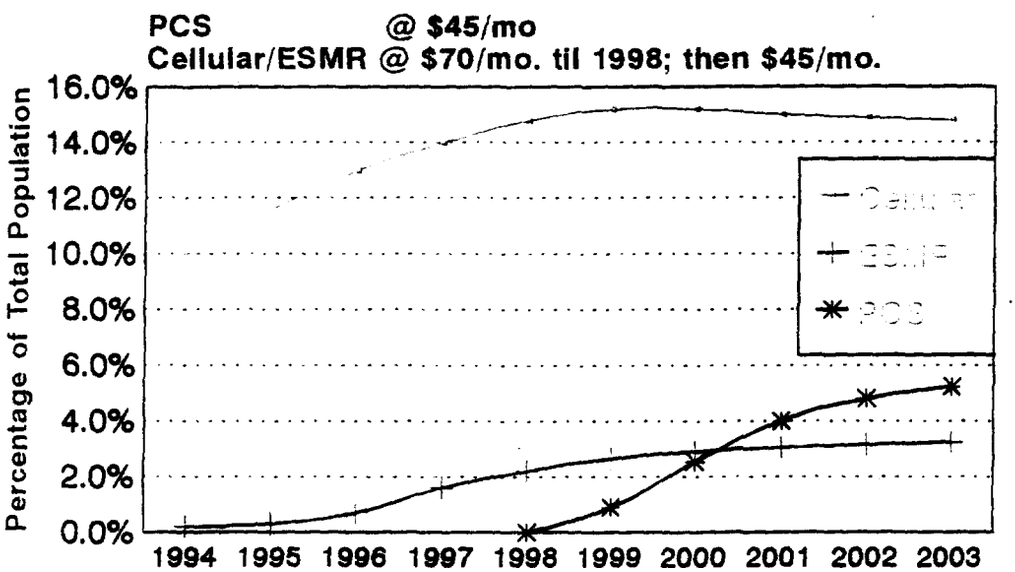
** Assumes digital ESMR and cellular operation in 1995, PCS operation in 1997.*

PCS Deployed 1998

If delays in aftermarket aggregation of licenses, microwave relocations and/or delays in the auction process push back the deployment of PCS until 1998, ***the potential market share for PCS providers will be significantly reduced and consumers are not likely to benefit from lower costs and more diverse wireless service features.*** Both cellular and ESMR services would be priced so that their average monthly subscriber bill is $70 until 1998. Once PCS services begin operation in 1998, cellular and ESMR providers are expected to lower their prices to match the average PCS bill of $45 per month. The big head- start given to cellular and ESMR providers will limit the market penetration of PCS providers over the ten year period (1994 to 2003). The projected market shares in 2003 for each type of wireless provider are shown below:

Two cellular providers	14.8%
One ESMR provider	3.2%
Three PCS providers	5.2%
Total wireless share	23.2%

MARKET SHARE



	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Cellular	10.0%	11.6%	13.0%	14.0%	14.8%	15.2%	15.2%	15.0%	14.9%	14.8%
ESMR	0.2%	0.3%	0.7%	1.6%	2.2%	2.7%	2.9%	3.1%	3.2%	3.2%
PCS					0.0%	0.9%	2.5%	4.0%	4.8%	5.2%

Beginning of Year

** Assumes digital ESMR and cellular operation in 1995, PCS operation in 1998.*

Creation of Simulation Model

The market simulation model is based on extensive quantitative survey research with 202 potential consumers of wireless services. Conjoint analysis was used to derive the utilities or values consumers place on the various attributes which comprise wireless telephone services (i.e. monthly price, equipment costs, sound quality, pricing method, range of coverage, etc.). Services can be described using the various options available for each attribute (e.g. $45 or $70 price level for monthly bill). The utilities for each of these options are summed by the market simulator to arrive at an overall value for that service. The overall values for each service are then compared to determine the most preferred service for that individual. This process is repeated for every consumer surveyed to arrive at an overall share of preference for the survey sample.

Projecting Results To Entire Population

The preferences of our random sample of consumers is projected to the entire population by weighting the income characteristics of the sample to the characteristics of the market being examined. Additional adjustments are made to account for consumers who were not interested in participating in our survey or who had insufficient income to be considered as viable candidates for wireless service (those under $25,000 annual income were excluded).

Differences Between PCS and Cellular

Coverage area for PCS was described to consumers as slightly smaller than that of cellular service, but still able to cover 85 to 90 percent of populations. Maps were used to explicitly show the areas covered. PCS was also described as having improved sound quality (equivalent to standard wireline service today) over analog cellular. Once cellular providers convert their capacity to digital service, the perceived differences in sound quality between digital cellular and PCS are expected to be minimal. However, PCS is expected to provide enhanced features not currently available with cellular services.

Equipment costs (handsets) for cellular service are expected to be significantly lower than those for PCS service during the time horizon being forecast. Cellular handsets are expected to remain in the $100 price range, while PCS handsets are expected to cost $250 each. Due to the intense competition expected between cellular and PCS providers, monthly service charges are expected to be very similar between the two services. Once PCS providers enter the market, cellular and PCS providers are expected to offer services with an average monthly bill of $45.

Assumptions For Market Simulations

No dramatic socio-economic changes are expected to take place during the time frame being forecast. In the model, consumer perceptions of cellular service are assumed to match those of PCS once cellular providers convert a major portion of their capacity to digital. Consumer perceptions of ESMR are also assumed to closely match those of PCS, once ESMR providers begin offering digital communications to a mass market. We also assume that another major technological advance (like PCS) will not take place in the market during the time frame being forecast.

Three PCS Competitors is Sufficient

Beyond three competitors, the overall wireless market appears to become saturated. The addition of new competitors above this level does not increase the total penetration by more than a few tenths of a percentage point. Consumers who are interested in PCS should be able to find a provider they like if given three to choose from. With three PCS providers, consumers would have a minimum of six wireless service providers including the two cellular providers and MCI/Nextel as an ESMR provider.